



July 18, 2007

Via Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW, TW – A325
Washington, DC 20554

Re: WT Docket No. 07-16 and WT Docket No. 07-30 – Notification of Oral Ex Parte Presentation

Dear Ms. Dortch:

On July 17, 2007, Dr. Paul Kolodzy of Kolodzy Consulting LLC, and the undersigned met with Julius Knapp, Bruce Romano, Alan Stillwell, Ira Keltz, Ronald Repasi and Jamison Prime of the FCC's Office of Engineering and Technology. During the meeting, we discussed the technical issues raised during the comment cycle on M2Z's license application. Enclosed is a document that was distributed at the meeting which outlines the issues that were discussed.

Please let me know if you have any questions regarding this submission.

Sincerely,

A handwritten signature in black ink, appearing to read 'Uzoma C. Onyeije', with a long horizontal stroke extending to the right.

Uzoma C. Onyeije

cc:

Julius Knapp
Bruce Romano
Alan Stillwell
Ira Keltz
Ronald Repasi
Jamison Prime

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National Broadband Radio Service WT 07-16, 07-30

Paul Kolodzy, PhD

Uzoma Onyeije, Esq

Outline

- **2155-2175 is Under-Utilized**
- **M2Z will not cause harmful interference**
 - » Existing Licensees in 2155-2175 MHz
 - » AWS Licensees
- **Technical Study of Service Rules**

2155-2175 is Under-Utilized

- **633 BRS Licenses**
- **20 Paging, Radio Telephone Licenses**
- **1192 Common Carrier Fixed Point Microwave**
- **10 Local Television Transmission Licenses**
- **1 Cellular**

As of July 16, 2007

M2Z will not cause harmful interference

Existing Licensees in 2155-2175 MHz

- **Co-Channel Interference Issues**
 - » BRS and FS operate in Fixed Frequencies at Fixed Locations
 - » FS operate primarily with narrow beamwidths
- **Mitigation Techniques**
 - » Operational Area Selection
 - » Spectral Sub-Band selection
 - » Smart Antenna Techniques
- **Goal**
 - » BRS: Same protection afforded by current BRS/EBS Emission Rules
 - » FS: Protect to interference criteria contained in Parts 23 and 101.

M2Z will not cause harmful interference

AWS Licensees

- **Packet-Based Digital Transmission Techniques are Currently Used**
 - » Spatial, Temporal, and Frequency Alignment
- **Interference Scenarios:**
 - » TDD Mobile Transmit to FDD Mobile Receive
 - » FDD Base Transmit to TDD Base Receive
- **OFCOM Report (TDD/FDD Interference)**
 - » “[t]he probability of worst-case scenario interference is low”
 - » “1.9% of mobile devices in high user density areas might suffer effects of 2.6 GHz MS-MS interference, for 1.4% of the time.”
 - » Without Mitigation Techniques, interference is <0.03% of the time.
- **Mitigation Techniques**
 - » Transmitter Power Control
 - » Spectral Sub-Band selection
 - » Smart Antenna Techniques